

**HERITAGE SURVEY OF THE ROCABAR AND MOTOR
CITY ACCESS ROAD, KOKSTAD, KZN**

FOR JG AFRIKA

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EXECUTIVE SUMMARY

The proposed Rocabar commercial development lies alongside Road R56 on the south-eastern side of Kokstad, KwaZulu-Natal. The completed project will consist of a new commercial complex and fuel filling station and requires a number of new roads and road upgrades for access.

The developments which are the focus of this study include the following:

- Construction of two new road sections with lengths of approximately 725 m and 290 m and a width of 10m – 17m; and*
- Stream/wetland crossings to be done on new bridges or culverts.*

A heritage survey was undertaken for the proposed Rocabar Motor City access road. The desktop study noted that there had been previous archaeological and palaeontological surveys in areas adjacent to the proposed road. The archaeological survey along the R56 did not locate any heritage material while the original Krantz Kop farmhouse was located ~2km eastwards.

Two palaeontological surveys noted that the Adelaide Subgroup occurred in the area and that these were fossiliferous deposits. The geotechnical report noted that most of the area to be affected by the proposed road occurs in alluvial deposits, while the proposed causeway will extend into the sandstone deposits. The geotechnical report notes that the causeway will only occur in the weathered sandstone deposits that are unlikely to contain fossils. The causeway itself is only 23m x 5m in size and this will have minimal impact.

No further heritage mitigation is required for this project.

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Abbreviations

HP	Historical Period
IIA	Indeterminate Iron Age
LIA	Late Iron Age
EIA	Early Iron Age
ISA	Indeterminate Stone Age
ESA	Early Stone Age
MSA	Middle Stone Age
LSA	Late Stone Age
HIA	Heritage Impact Assessment
PIA	Palaeontological Impact Assessment

INTRODUCTION

The proposed Rocabar commercial development lies alongside Road R56 on the south-eastern side of Kokstad, KwaZulu-Natal. The completed project will consist of a new commercial complex and fuel filling station and requires a number of new roads and road upgrades for access.

The developments which are the focus of this study include the following:

- Construction of two new road sections with lengths of approximately 725 m and 290 m and a width of 10m – 17m; and
- Stream/wetland crossings to be done on new bridges or culverts.

A wetland and watercourse system flows through the area from southeast to northwest and, at a point about 500 m from Road 1, discharges into the Mzintlava River.

The area has been under agricultural cultivation for some time and the land is disturbed.

Umlando was contracted by JG Afrika undertake the heritage survey of the proposed Rocabar and Motor City access roads.

Figures 1 – 4 show the location of the development.

FIG. 1 GENERAL LOCATION OF THE PROPOSED DEVELOPMENT

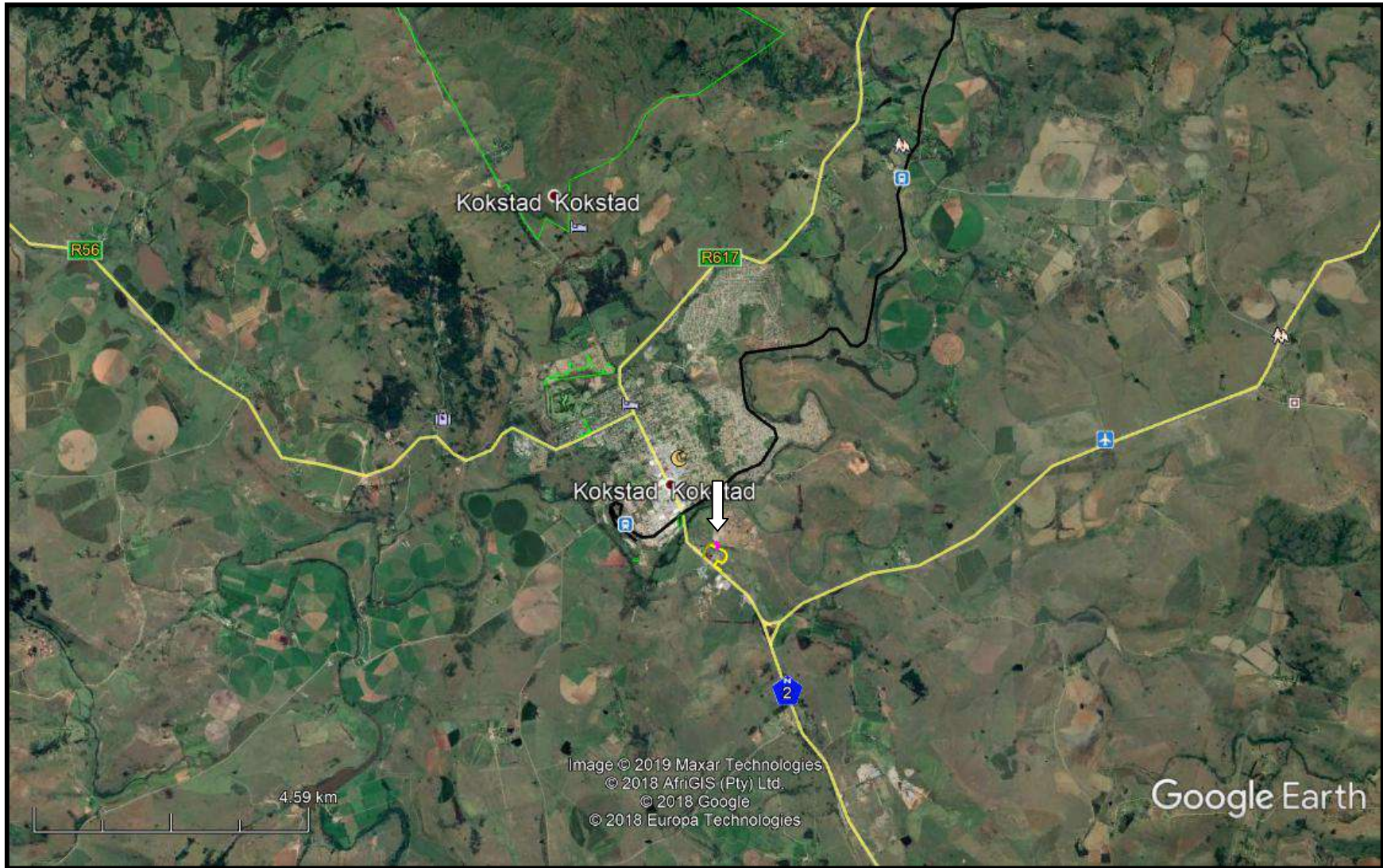


FIG. 2: AERIAL OVERVIEW OF THE PROPOSED DEVELOPMENT OF ERF 1703

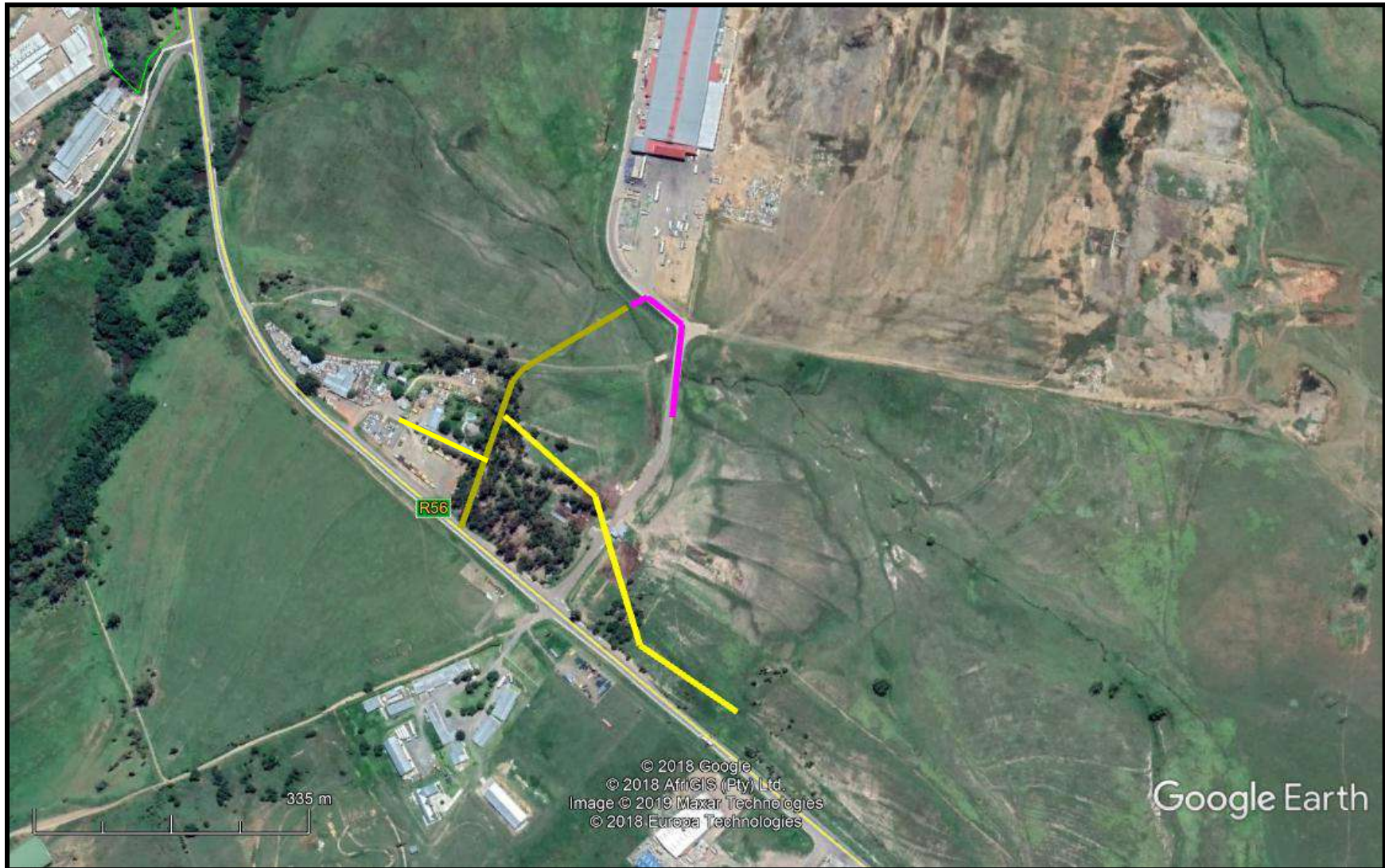


FIG. 3: TOPOGRAPHICAL MAP OF THE PROPOSED DEVELOPMENT

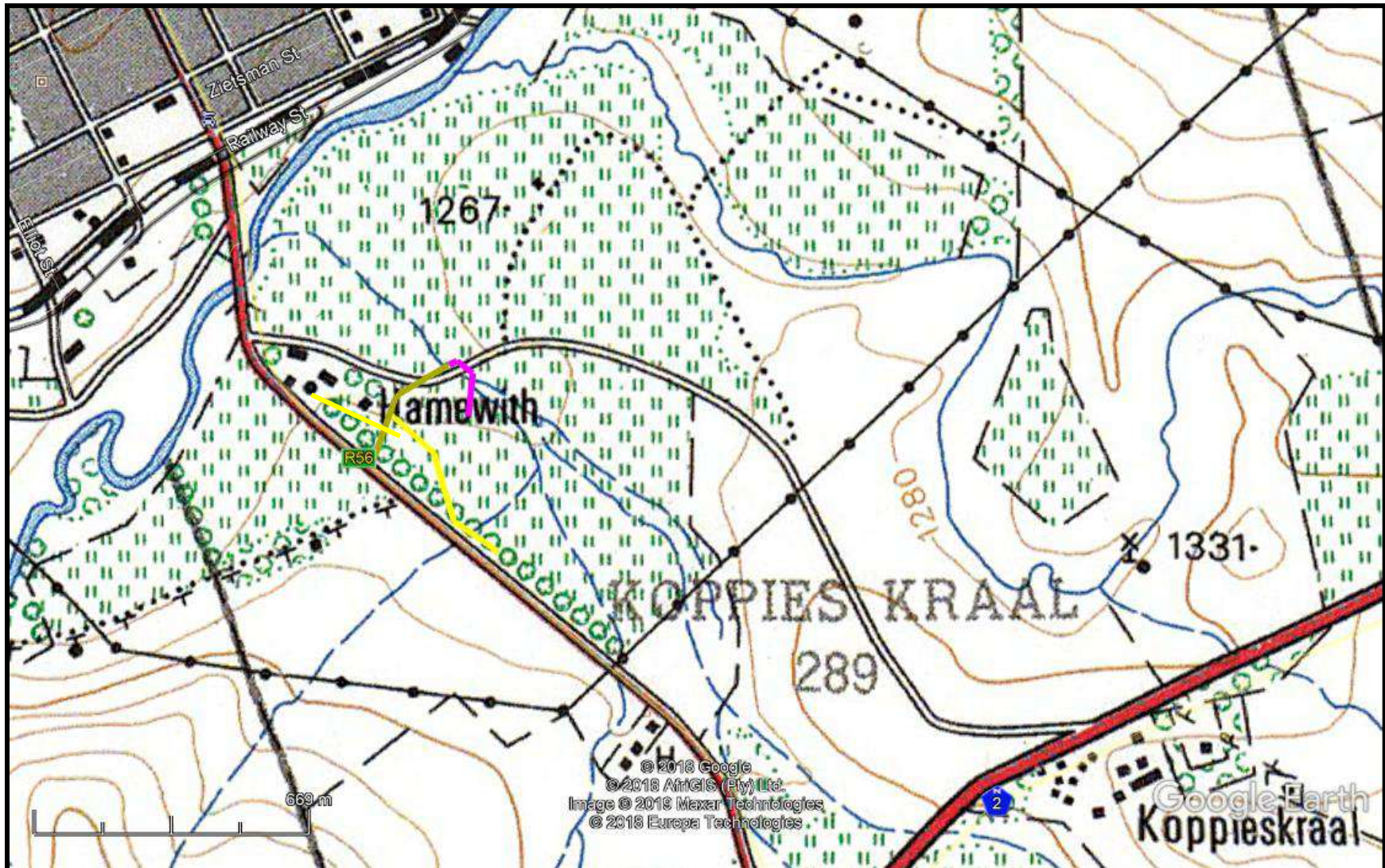


FIG. 4: SCENIC VIEWS OF THE STUDY AREA



KWAZULU NATAL AMAFA AND RESEARCH INSTITUTE, ACT 05, 2018

“General protection: Structures.—

- No structure which is, or which may reasonably be expected to be older than 60 years, may be demolished, altered or added to without the prior written approval of the Council having been obtained on written application to the Council.
- Where the Council does not grant approval, the Council must consider special protection in terms of sections 38, 39, 40, 41 and 43 of Chapter 9.
- The Council may, by notice in the *Gazette*, exempt—
- A defined geographical area; or
- defined categories of sites within a defined geographical area, from the provisions of subsection where the Council is satisfied that heritage resources falling in the defined geographical area or category have been identified and are adequately protected in terms of sections 38, 39, 40, 41 and 43 of Chapter 9.
- A notice referred to in subsection (2) may, by notice in the *Gazette*, be amended or withdrawn by the Council.

General protection: Graves of victims of conflict.—No person may damage, alter, exhume, or remove from its original position—

- the grave of a victim of conflict;
- a cemetery made up of such graves; or
- any part of a cemetery containing such graves, without the prior written approval of the Council having been obtained on written application to the Council.
- General protection: Traditional burial places.—
- No grave—
- not otherwise protected by this Act; and
- not located in a formal cemetery managed or administered by a local authority, may be damaged, altered, exhumed, removed from its original

position, or otherwise disturbed without the prior written approval of the Council having been obtained on written application to the Council.

The Council may only issue written approval once the Council is satisfied that—

- the applicant has made a concerted effort to consult with communities and individuals who by tradition may have an interest in the grave; and
- the applicant and the relevant communities or individuals have reached agreement regarding the grave.

General protection: Battlefield sites, archaeological sites, rock art sites, palaeontological sites, historic fortifications, meteorite or meteorite impact sites.—

- No person may destroy, damage, excavate, alter, write or draw upon, or otherwise disturb any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the Council.
- Upon discovery of archaeological or palaeontological material or a meteorite by any person, all activity or operations in the general vicinity of such material or meteorite must cease forthwith and a person who made the discovery must submit a written report to the Council without delay.
- The Council may, after consultation with an owner or controlling authority, by way of written notice served on the owner or controlling authority, prohibit any activity considered by the Council to be inappropriate within 50 metres of a rock art site.
- No person may exhume, remove from its original position or otherwise disturb, damage, destroy, own or collect any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site without the prior written approval of the Council having been obtained on written application to the Council.
- No person may bring any equipment which assists in the detection of metals and archaeological and palaeontological objects and material, or

- excavation equipment onto any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, or meteorite impact site, or use similar detection or excavation equipment for the recovery of meteorites, without the prior written approval of the Council having been obtained on written application to the Council.
- The ownership of any object or material associated with any battlefield site, archaeological site, rock art site, palaeontological site, historic fortification, meteorite or meteorite impact site, on discovery, vest in the Provincial Government and the Council is regarded as the custodian on behalf of the Provincial Government.”

METHOD

The method for Heritage assessment consists of several steps.

The first step forms part of the desktop assessment. Here we would consult the database that has been collated by Umlando. This databases contains archaeological site locations and basic information from several provinces (information from Umlando surveys and some colleagues), most of the national and provincial monuments and battlefields in Southern Africa (<http://www.vuvuzela.com/googleearth/monuments.html>) and cemeteries in southern Africa (information supplied by the Genealogical Society of Southern Africa). We use 1st and 2nd edition 1:50 000 topographical and 1937 aerial photographs where available, to assist in general location and dating of buildings and/or graves. The database is in Google Earth format and thus used as a quick reference when undertaking desktop studies. Where required we would consult with a local data recording centre, however these tend to be fragmented between different institutions and areas and thus difficult to access at times. We also consult with an historical architect, palaeontologist, and an historian where necessary.

The survey results will define the significance of each recorded site, as well as a management plan.

All sites are grouped according to low, medium, and high significance for the purpose of this report. Sites of low significance have no diagnostic artefacts or features. Sites of medium significance have diagnostic artefacts or features and these sites tend to be sampled. Sampling includes the collection of artefacts for future analysis. All diagnostic pottery, such as rims, lips, and decorated sherds are sampled, while bone, stone, and shell are mostly noted. Sampling usually occurs on most sites. Sites of high significance are excavated and/or extensively sampled. Those sites that are extensively sampled have high research potential, yet poor preservation of features.

Defining significance

Heritage sites vary according to significance and several different criteria relate to each type of site. However, there are several criteria that allow for a general significance rating of archaeological sites.

These criteria are:

1. State of preservation of:

- 1.1. Organic remains:
 - 1.1.1. Faunal
 - 1.1.2. Botanical
- 1.2. Rock art
- 1.3. Walling
- 1.4. Presence of a cultural deposit
- 1.5. Features:
 - 1.5.1. Ash Features
 - 1.5.2. Graves

- 1.5.3. Middens
- 1.5.4. Cattle byres
- 1.5.5. Bedding and ash complexes

2. Spatial arrangements:

- 2.1. Internal housing arrangements
- 2.2. Intra-site settlement patterns
- 2.3. Inter-site settlement patterns

3. Features of the site:

- 3.1. Are there any unusual, unique or rare artefacts or images at the site?
- 3.2. Is it a type site?
- 3.3. Does the site have a very good example of a specific time period, feature, or artefact?

4. Research:

- 4.1. Providing information on current research projects
- 4.2. Salvaging information for potential future research projects

5. Inter- and intra-site variability

- 5.1. Can this particular site yield information regarding intra-site variability, i.e. spatial relationships between various features and artefacts?
- 5.2. Can this particular site yield information about a community's social relationships within itself, or between other communities?

6. Archaeological Experience:

6.1. The personal experience and expertise of the CRM practitioner should not be ignored. Experience can indicate sites that have potentially significant aspects, but need to be tested prior to any conclusions.

7. Educational:

- 7.1. Does the site have the potential to be used as an educational instrument?
- 7.2. Does the site have the potential to become a tourist attraction?
- 7.3. The educational value of a site can only be fully determined after initial test-pit excavations and/or full excavations.

8. Other Heritage Significance:

- 8.1. Palaeontological sites
- 8.2. Historical buildings
- 8.3. Battlefields and general Anglo-Zulu and Anglo-Boer sites
- 8.4. Graves and/or community cemeteries
- 8.5. Living Heritage Sites
- 8.6. Cultural Landscapes, that includes old trees, hills, mountains, rivers, etc related to cultural or historical experiences.

The more a site can fulfill the above criteria, the more significant it becomes. Test-pit excavations are used to test the full potential of an archaeological deposit. This occurs in Phase 2. These test-pit excavations may require further excavations if the site is of significance (Phase 3). Sites may also be mapped and/or have artefacts sampled as a form of mitigation. Sampling normally occurs when the artefacts may be good examples of their type, but are not in a primary archaeological context. Mapping records the spatial relationship between features and artefacts.

RESULTS

DESKTOP STUDY

The desktop study consisted of analysing various maps for evidence of prior habitation in the study area, as well as for previous archaeological surveys. There have been no prior surveys in the study area. The archaeological sites tend to be open Stone Age scatters of low significance (fig. 5). Ethembeni undertook a survey of part of the R56 and did not find any heritage sites (2012). Anderson (2012) undertook a survey on the neighbouring farm Krantz Fontein where 19th century houses and kraals were noted

FIG. 5: LOCATION OF KNOWN HERITAGE SITES IN THE GENERAL AREA

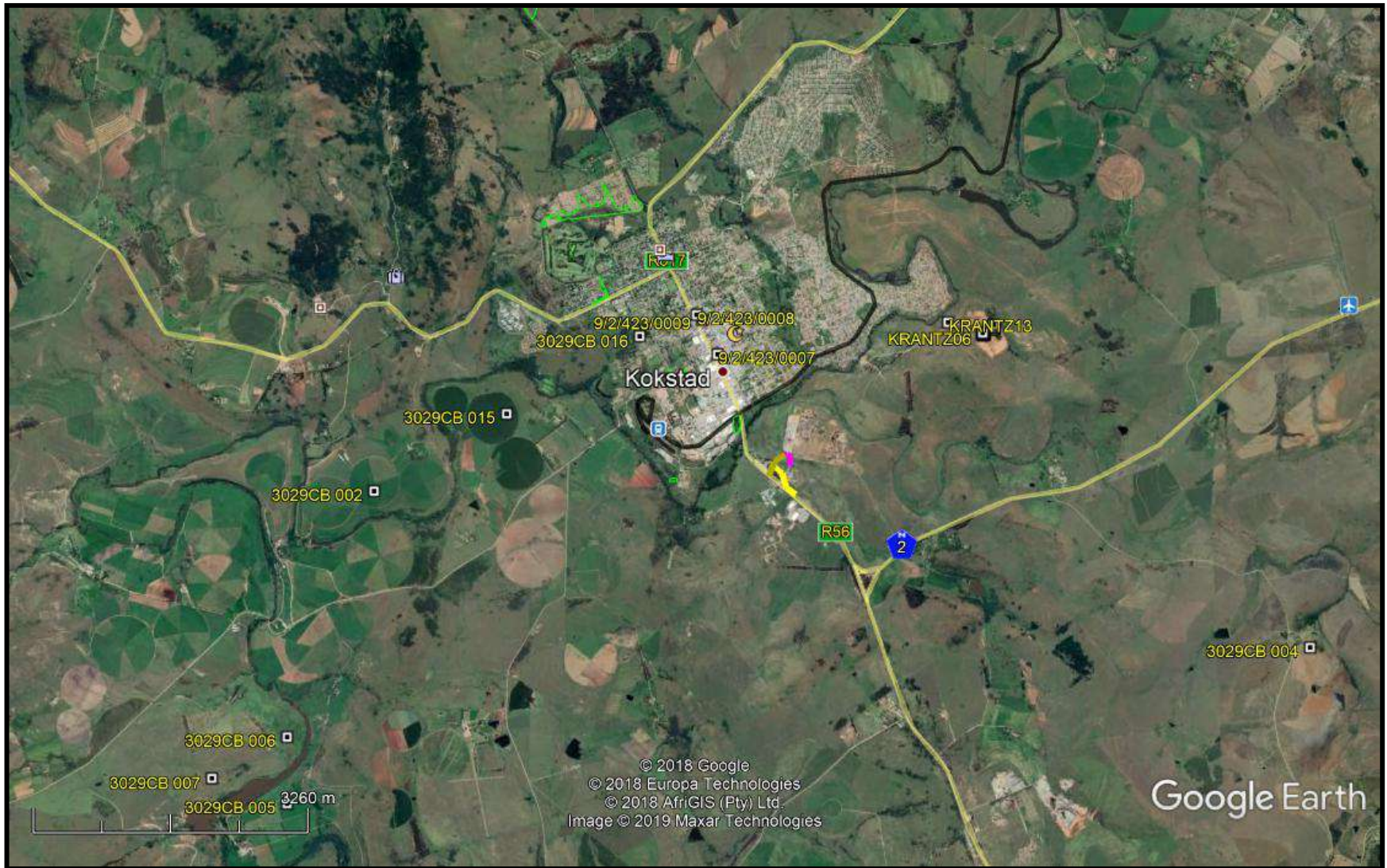


FIG. 6: KOPPIES KRAAL 289 (1875)

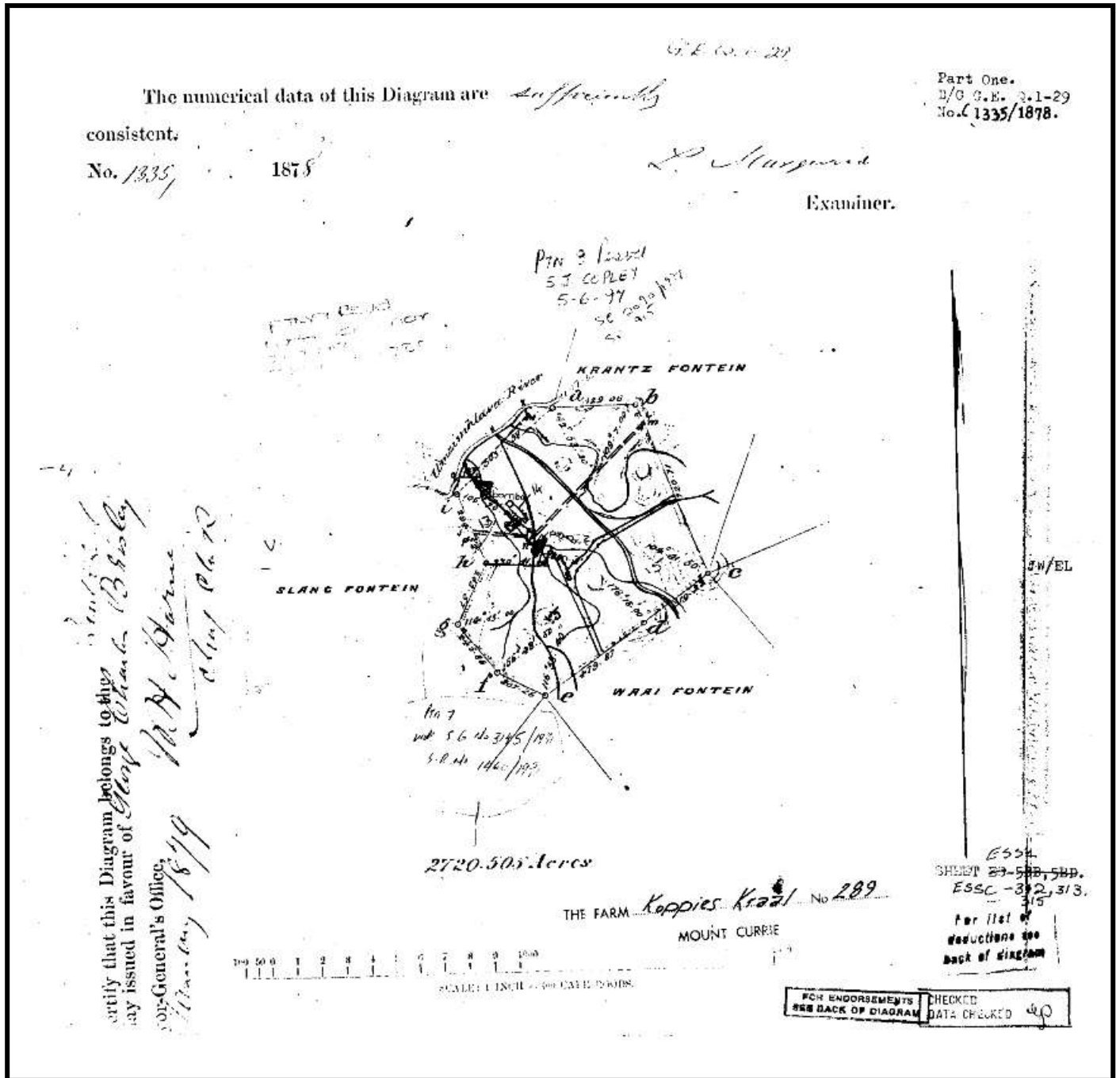
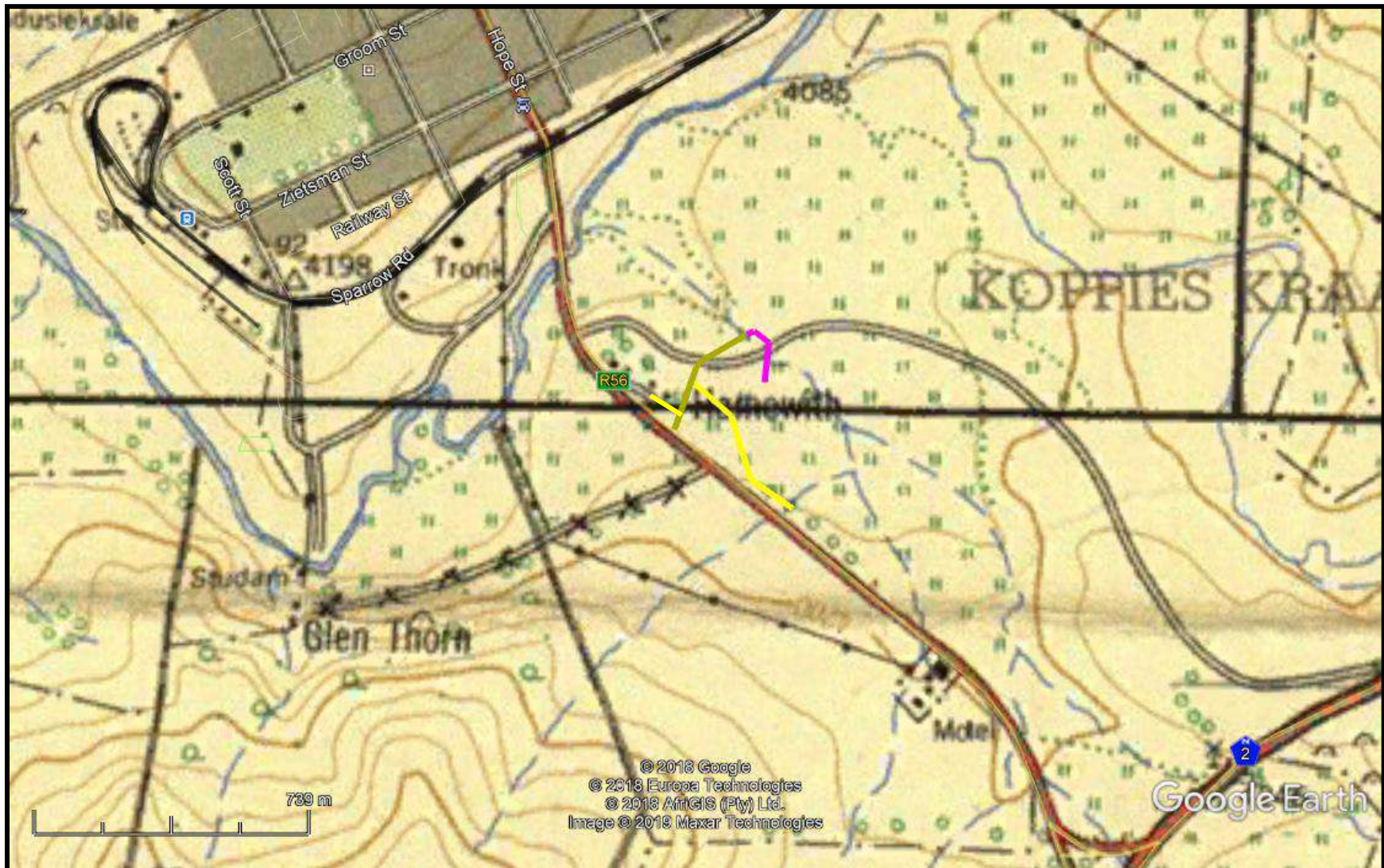


FIG. 7: LOCATION OF PROPOSED DEVELOPMENT IN 1953



FIG. 8: LOCATION OF PROPOSED DEVELOPMENT IN 1963



The Farm Koppies Kraal 289 was first surveyed in 1875 (fig. 6). There are possible buildings on the SG map. The 1953 aerial photograph indicates that there are houses on the property but not those indicated in the SG map (fig. 7).

The 1963 1:50 000 topographical map indicates the house still exists (fig. 8). The possible house from the SG map is southeast of the proposed road and does not show up on any of the maps.

PALAEONTOLOGICAL SENSITIVITY

The area is in an area of high palaeontological sensitivity (fig. 9). The formation forms part of the same formation identified by Dr Groenewald (Anderson 2012) on the Farm Krantzkop 2km to the east, and by Dr Gees (2011) along the R56. Both reports note that the area has the Adelaide Subgroup. The Adelaide Subgroup is highly productive as far as fossils are concerned. Fossils include plant fossils of *Glossopteris* and vertebrate fossils of the *Dicynodon* and *Lystrosaurus* Assemblage zones. Both reports recommended that a PIA is undertaken if unweathered bedrock

The geotechnical report (Terratest 2019) notes that the affected area is predominantly alluvial soils. Only the area where a relatively small culvert will be placed will intrude on the sandstone of the Adelaide Subgroup. The geotechnical report notes that the sandstone in the culvert area is occurs approximately 1.2m below the surface and it is weathered up to 1.7m below the surface.

The culvert is approximately 23m x 5m in size and will have minimal impact on the weathered Adelaide subgroup. It would also be exempt from the need for a PIA due to its size. It is for this reason that a PIA desktop was not requested for this specific area and that two separate reports had the same conclusions.

If any fossiliferous material is noticed during construction, then a qualified palaeontologist needs to be informed and mitigation would be required.

FIG. 9: PALAEOANTHROPOLOGICAL SENSITIVITY MAP



FIELD SURVEY RESULTS

A field survey was undertaken on 3 December 2019. Ground visibility was very good. Much of the land has been used for pasturage and/or agricultural crops and ploughing activity was visible.

The proposed line route will not affect any buildings that occur on the opposite side of a fence (fig. 4 top left).

No artefacts were noted in the proposed road alignment and adjacent areas.

No further HIA mitigation is required.

CONCLUSION

A heritage survey was undertaken for the proposed Rocabar Motor City access road. The desktop study noted that there had been previous archaeological and palaeontological surveys in areas adjacent to the proposed road. The archaeological survey along the R56 did not locate any heritage material while the original Krantz Kop farmhouse was located ~2km eastwards.

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No further heritage mitigation is required for this project.

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Terratest 2019. Kokstad Additional Works (Access Road And Culvert) Geotechnical Investigation Report

EXPERIENCE OF THE HERITAGE CONSULTANT

Gavin Anderson has a M. Phil (in archaeology and social psychology) degree from the University of Cape Town. Gavin has been working as a professional archaeologist and heritage impact assessor since 1995. He joined the Association of Professional Archaeologists of Southern Africa in 1998 when it was formed. Gavin is rated as a Principle Investigator with expertise status in Rock Art, Stone Age and Iron Age studies. In addition to this, he was worked on both West and East Coast shell middens, Anglo-Boer War sites, and Historical Period sites.

DECLARATION OF INDEPENDENCE

I, Gavin Anderson, declare that I am an independent specialist consultant and have no financial, personal or other interest in the proposed development, nor the developers or any of their subsidiaries, apart from fair remuneration for work performed in the delivery of heritage assessment services. There are no circumstances that compromise the objectivity of my performing such work.

A handwritten signature in black ink, appearing to read 'G. Anderson', with a horizontal line underneath.

Gavin Anderson
Archaeologist/Heritage Impact Assessor